

REMARKS

By this amendment, claims 1, 3, and 11 have been amended. Claims 5, 7-10, and 13-33 have been previously withdrawn from further consideration. Claim 6 has been previously canceled. Accordingly, claims 1-4 and 11-12 are currently pending in the application, of which claims 1, 3, and 11 are independent claims.

Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification. Support for the amendments may be found at least at paragraphs [0049] to [0050] of the specification.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

Rejections Under 35 U.S.C. § 103

To establish an obviousness rejection under 35 U.S.C. § 103(a), four factual inquiries must be examined. The four factual inquiries include (a) determining the scope and contents of the prior art; (b) ascertaining the differences between the prior art and the claims in issue; (c) resolving the level of ordinary skill in the pertinent art; and (d) evaluating evidence of secondary consideration. *Graham v. John Deere*, 383 U.S. 1, 17-18 (1966). In view of these four factors, the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and should "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l. Co. v. Teleflex, Inc.*, 550 U.S. ___, slip op. at 14-15 (2007). Thus, even if the prior art may be combined, the references when combined must disclose or suggest all of the claim limitations. See *in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claims 1-4 and 11-12 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,506,635 issued to Yamazaki, *et al.* ("Yamazaki") in view of U.S. Patent Application Publication No. 2005/0247940 applied for by Shibata, *et al.* ("Shibata").

Applicants submit that Yamazaki and Shibata, alone or combined, fail to disclose every feature of claim 1 as amended. Claim 1 as amended recites, *inter alia*:

wherein ... the thin film transistor in the pixel array portion further comprises a first source/drain region contacting the first channel region, a second source/drain region contacting the second channel region, and an offset region, and

wherein the offset region directly contacts the first channel region and the second channel region and has a lower doping concentration than a doping concentration of the first source/drain region and a doping concentration of the second source/drain region.

The examiner concurs that Yamazaki fails to disclose "an offset region." Office Action, page 3. However, Shibata fails to remedy the shortcomings of Yamazaki. Shibata describes that the lightly doped drain regions (106, 107, 206, 207, 506, 507, 606, and 607), which contact the channel regions (101, 102, 201, 202, 501, 502, 601, and 602), have a lower concentration of impurities than the high concentration impurity regions (104, 204, 504, 604) arranged between the channel regions (101, 102, 201, 202, 501, 502, 601, and 602). Shibata, paragraph [0094]. Further, Shibata discloses that "only the high concentration impurity region is formed between the two channel forming regions." Shibata, paragraph [0097]. Therefore, Shibata's high concentration impurity regions (104, 204, 504, 604) fail to disclose every feature of the "offset region" as recited in claim 1. For at least this reason, Shibata fails to remedy the shortcomings of Yamazaki, and Yamazaki and Shibata, alone or combined, fail to disclose every feature of claim 1 as amended.

Claims 3 and 11 have been amended consistently with claim 1, and are therefore allowable over the combination of Yamazaki in view of Shibata for at least the reasons asserted above with respect to claim 1.

Claims 1-4 and 11-12 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent Application Publication No. 2003/0062499 applied for by Yamazaki ("Yamazaki '99") in view of Shibata.

Applicants submit that Yamazaki '99 and Shibata, alone or combined, fail to disclose every feature of claims 1, 3, and 11 as amended. The examiner concurs that Yamazaki '99 fails to disclose "an offset region directly contacting a first channel region and a second channel region." Office Action, page 6. However, for at least the reasons asserted above, Shibata fails to remedy the shortcomings of Yamazaki '99.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 1-4 and 11-12. Claims 2, 4, and 12 depend from claims 1, 3, and 11, respectively, and are allowable at least for this reason. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claims 1, 3, and 11, and all the claims that depend therefrom, are allowable.

CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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